Remarks

1. Summary of Office Action

In the office action mailed April 29, 2004, the Examiner rejected claims 3-9, 11-13, 16-21, and 23 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,421,544 (Sawada). Further, the Examiner rejected claims 25-26, 28-29, 33-34, and 36-37 under 35 U.S.C. § 103(a) as being obvious over a combination of Sawada and U.S. Patent No. 5,778,304 (Grube).

2. Interview Summary

The undersigned participated in an interview with Examiner Khawar Iqbal and his acting supervisor Mr. Appiah on June 17, 2004. During the interview, we discussed the claimed invention and distinctions between the claimed invention and the prior art. In particular, we discussed that the invention involves providing a location-based signal to a device that gives the device *additional* control logic (e.g., application layer logic) not already defined in the device, rather than simply telling the device to switch between operation modes already defined in the device. The Examiners suggested that we modify the claims to make this point of distinction more clear, which we have now done.

3. Amendments and Pending Claims

In order to more particularly point out and distinctly claim the subject that Applicant regards as the invention, Applicant has amended claims 4, 7, 11-13, 16-18, 23, 33, and 36-37, cancelled claim 34, and added new claims 38-39. Now pending in this application are claims 3-9, 11-13, 16-21, 23, 25-26, 28-29, 33, and 36-39, of which claims 11, 23, and 36-39 are independent, and the remainder are dependent. (Note that claim 33 now depends from claim 11, rather than standing as an independent claim. Also, note that new claims 38 and 39 are offshoots of former claims 23 and 36, now set forth separately for clarity.)

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The invention as claimed is directed to a method and system for adapting device functionality based on location. Generally speaking, the invention involves the device receiving a location-based control signal that carries a set of additional control logic for the device to execute. As recited in various ways in the pending claims, the additional control logic may (i) define a new functional response to a primitive so that when the device thereafter receives the primitive the device carries out the new functional response, (ii) define a new primitive for the device to employ in carrying out a function so that when the device thereafter carries out the function the device employs the new primitive, and/or (iii) define a new function and instructing the device to employ an existing primitive when carrying out the new function.

All claims except claim 37 recite (expressly or by dependency) that, upon receipt of the control signal, the device stores the additional control logic in its data storage and thereafter executes the additional control logic (for instance, executes a function newly defined by the additional control logic in response to an existing primitive, uses a new primitive defined by the additional control logic in carrying out an existing function, and/or uses an existing primitive in carrying a new function defined by the additional control logic). Claim 37 recites that the logic provided by the control signal (i) defines a new primitive that is not currently defined in the device or (ii) defines a new function that is not currently defined in the device, and claim 37 recites that the device changes its control logic to embody such a new primitive or new function.

Further, various ones of the claims recite that, after receiving the control signal, the device prompts a user for approval of changing functionality of the device, and that the device flags the newly stored additional control logic as being active control logic, so that the device thereafter applies that active control logic.

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4. Response to § 102 Rejections

As noted above, the Examiner rejected claims 3-9, 11-13, 16-21, and 23 under 35 U.S.C. § 102(e) as being anticipated by Sawada. Under M.P.E.P. § 2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Applicant respectfully traverses the anticipation rejection of pending claims 3-9, 11-13, 16-21, and 23 because Sawada does not disclose or suggest each and every element as recited in any of these claims.

In particular, Sawada fails to disclose that a control signal itself carries/comprises additional control logic that defines new logic for the device to carry out in practice. At best, Sawada teaches that a location-based control signal is sent to a device in order to cause the device to simply switch between sets of logic already defined in the device.

More specifically, considering independent claim 11, Sawada fails to teach a method in which a device that has existing control logic defining a first functional response to a first primitive (i) receives a location-based signal that gives the device additional control logic to be executed by the device in response to the first primitive, where the additional control logic defines a new functional response to the first primitive, (ii) stores the additional control logic in data storage, and (iii) thereafter, upon receipt of the first primitive, responsively carries out the new functional response rather than the first functional response.

Similarly, considering independent claim 23, Sawada fails to teach a method in which a device that has existing control logic that causes the device to employ a first predetermined primitive in carrying out a first function, (i) receives a location-based signal that gives the device additional control logic to be executed by the device in carrying out the first function, where the additional control logic defines a new primitive for the device to employ in carrying out the first

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function, (ii) stores the additional control logic in data storage, and (iii) thereafter employs the new primitive when carrying out the first function.

And similarly, considering independent claim 38 (which, as noted above, was split off from claim 23), Sawada fails to teach a method in which a device that has existing control logic that causes the device to employ a first predetermined primitive in carrying out a first function, (i) receives a location-based signal that gives the device additional control logic to be executed by the device, where the additional control logic defines a new function and instructs the device to employ the first predetermined primitive in carrying out the new function, (ii) stores the additional control logic in data storage, and (iii) thereafter employs the first predetermined primitive when carrying out the new function.

At best, Sawada teaches (i) a device that includes predefined modes of operation (e.g., different states of control logic) and (ii) a method in which the device receives a "mode change signal" that directs the device to switch from one of the predefined modes of operation to another one of the predefined modes of operation. (*See*, *e.g.*, Sawada, at 7, lines 52-53; column 10, lines 24-34; column 14, line 7). But Sawada does not teach that the "mode change signal" itself includes a set of additional control logic defining a new function or a new primitive for the device to use in practice.

Because Sawada does not teach each and every element of claims 11 and 23 Sawada fails to anticipate claims 11 and 23 under 35 U.S.C. § 102(e). Further, because each of claims 3-9, 12-13 and 16-21 depend from either claim 11 or claim 23, Sawada necessarily also fails to anticipate claims 3-9, 12-13 and 16-21 as well. Further, because Sawada does not teach each and every element of claim 38, Sawada also fails to anticipate claim 38.

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5. Response to § 103 Rejections

The Examiner next rejected claims 25-26, 28-29, 33-34, and 36-37 under 35 U.S.C. § 103(a) as being obvious over a combination of Sawada and Grube. According to M.P.E.P § 2143, in order to establish a prima facie case of obviousness of a claimed invention by applying a combination of references, the combination must disclose or suggest all of the claim limitations. Applicant respectfully traverses the obviousness rejection of claims 25-26, 28-29, 33-34, and 36-37 because the combination of Sawada and Grube fails to disclose or suggest all of the limitations of any of these claims.

Considering independent claim 36, for instance, the combination of Sawada and Grube fails to disclose or suggest a system in which a device (i) is programmed to carry out a first function in response to a first primitive (ii) receives a location-based control signal that carries additional control logic to be executed by the device in response to the first primitive, where the additional control logic defines a new function for the device to carry out in response to the first primitive, (iii) stores the additional control logic in data storage, (iv) prompts a user for approval to change functionality of the device, (v) flags the additional control logic as active, and thereafter, upon receipt of the first primitive, responsively carries out the new function rather than the first function.

Considering independent claim 37, for instance, the combination of Sawada and Grube fails to disclose or suggest a system in which (i) a device is programmed to execute a set of control logic that causes the device to employ a first predetermined primitive in carrying out a first function, (ii) a local transmission system is arranged to emit a control signal in a given location, which carries additional control logic defining (a) a new primitive for the device to employ in carrying out the first function, where the new primitive is not currently defined in the

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device, or (b) a new function and indicates that the device should employ the first predetermined primitive in carrying out the new function, where the new function is not currently defined in the device), (iii) the device receives the control signal and responsively changes its control logic to embody the new control logic, (iv) the device thereafter applies the new control logic, and (v) the device is programmed to prompt a user for approval of changing functionality of the device.

And considering independent claim 39, the combination of Sawada and Grube fails to disclose or suggest a system in which a device that is programmed to carry out a first function in response to a first primitive (i) receives a location-based control signal that carries additional control logic to be executed by the device, where the additional control logic defines a new primitive in response to which the device will carry out the first function, (ii) stores the additional logic in data storage, (iii) prompts a user for approval to change functionality of the device, (iii) flags the additional logic as active, and (iv) thereafter employs the new primitive, rather than the first primitive, in carrying out the first function.

At best, the combination of Sawada and Grube teaches a device with pre-defined operational modes and service capabilities, various keys to output various operation signals, a user-specified mode table, a predetermined message sent to the device to alter or reconfigure the pre-defined operational modes and service capabilities, a display for displaying a message to inform a user of altered or reconfigured predefined operational modes and services capabilities, and that a predefined message may require an action, which at the option of the device operator or a system manager may be done automatically or manually. For instance, as the Examiner noted, Sawada teaches the CPU detecting the change destination mode by referring to the user-specified mode table and changing the destination mode (from one pre-defined mode to a second pre-defined mode). (Sawada at col. 13, lines 30-36). Grube then similarly teaches transmission

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of a predefined message to a device (communication unit) to alter or reconfigure the communication services that the communication unit may request and to display a text message to inform the user of the altered or reconfigured service capabilities. (Grube, col. 3, lines 30-52).

In rejecting claims 33 and 34, the Examiner stated that "Grube et al teaches receiving a user response indicating whether or not the user approves" and the Examiner cited (col. 3, lines 30-52) in support. In rejecting claims 36 and 37, the Examiner stated that "Grube et al teaches [prompting a] user of the device for approval of changing [the set of control logic] after the device receives the control signal" and again the Examiner cited (col. 3, lines 30-52) in support. As far as Applicant can tell, these portions of Grube indicate merely that the device may display a text message for informing the user of the altered or reconfigured service capabilities or that an alarm may be triggered to indicate the reconfiguration and that if the predefined message requires an action, the action may be done automatically or manually. However, Applicant does not see in Grube any teaching of asking the user of the device for approval or disapproval to change control logic so as to embody additional control logic defining a new function or a new primitive and sending a response indicating approval or disapproval.

Because the combination of Sawada and Grube fails to disclose or suggest all of the limitations of any of claims 36-37 and 39, a prima facie case of obviousness of these claims does not exist. Further, because each of claims 25-26 and 28-29 depend from either claim 36 or claim 37, a prima facie case of obviousness of claims 25-26 and 28-29 does not exist as well. Applicant traverses the rejection of claim 34 as moot, as that claim has been cancelled.

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6. Conclusion

For the foregoing reasons, Applicant submits that claims 3-9, 11-13, 16-21, 23, 25-26, 28-29, 33, and 36-39 are in condition for allowance. Therefore, Applicant respectfully requests favorable reconsideration and allowance of all of the claims.

Respectfully submitted,

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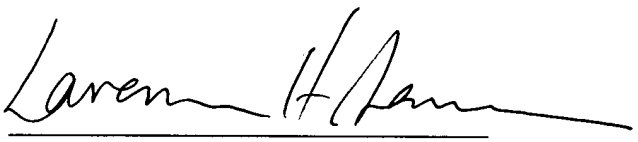
By: 

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